

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
30 October 2003 (30.10.2003)

PCT

(10) International Publication Number
WO 03/088951 A1

(51) International Patent Classification⁷: **A61K 9/14**,
31/192, 38/13

Engineering and Industrial Chemistry, University of New
South Wales, Sydney, New South Wales 2052 (AU).

(21) International Application Number: PCT/AU03/00453

(74) Agent: **FREEHILLS CARTER SMITH BEADLE**;
Level 43, 101 Collins Street, Melbourne, Victoria 3000
(AU).

(22) International Filing Date: 15 April 2003 (15.04.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
PS 1744 15 April 2002 (15.04.2002) AU
2003901180 12 March 2003 (12.03.2003) AU

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU,
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,
CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,
MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD,
SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US,
UZ, VC, VN, YU, ZA, ZM, ZW.

(71) Applicant (*for all designated States except US*): **EIFFEL
TECHNOLOGIES LIMITED** [AU/AU]; Level 14, 50
Market Street, Melbourne, Victoria 3000 (AU).

(72) Inventors; and

(75) Inventors/Applicants (*for US only*): **FOSTER, Neil**,
Russell [AU/AU]; 9 Golden Grove, Cherrybrook, New
South Wales 2126 (AU). **REGTOP, Hubert, Leonardus**
[AU/AU]; 18 Murchison Street, Mittagong, New South
Wales 2575 (AU). **DEGHANI, Fariba** [AU/AU]; 8/83
Dalmeny Avenue, Rosebery, New South Wales 2018 (AU).
TANDYA, Andrian [ID/AU]; c/- School of Chemical

(84) Designated States (*regional*): ARIPO patent (GH, GM,
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),
Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI,
SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN,
GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: FORMULATION OF FINE PARTICLES USING LIQUEFIED OR DENSE GASES

(57) Abstract: The invention provides a method for manipulating or formulating a solid substance which melts under pressure of a gas without degrading at a temperature lower than the melting point of the substance at atmospheric pressure including: applying to the substance a liquefied gas or dense gas to melt the substance without degrading the substance; then contacting the molten substance with a carrier fluid, which is at substantially the same pressure as the liquefied gas or dense gas, to form a solution or mixture of at least a part of the molten substance and the carrier fluid; and passing the solution or mixture into a vessel of lower pressure than the pressure of the liquefied gas or dense gas and carrier fluid to form particles of the substance; and particles formed by the method.

WO 03/088951 A1